

REMARKS

Reconsideration is respectfully requested.

Claims 1, 2, 4-37 and 39-40 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sallberg in view of Hall et al. Claims 38 and 41 were rejected under 35 U.S.C. 103(a) as being unpatentable over Sallberg in view of Hall et al. as addressed in claims 36, 37, 39 and 40 above, and further in view of Hartmeier.

In response to Applicants' patentability arguments filed January 8, 2005 regarding Hall, the Office Action states that Hall discloses an MSC sending a "feature service request" to a data network because Hall states at column 7, lines 33-41 that the MSC is "responsible for the configuration of the radio network resources necessary for implementing the packet data service," and "[p]acket data service user data and control signalling data exchanged between a base station, which here implements the packet radio interface, and the packet data node PDN is also carried semipermanently through the MSC." The Office Action further states that Hall discloses a "service feature request" because Hall assertedly teaches at column 8, lines 46-51 and column 11, lines 49-52 that "packet data is provided from the packet data network PDN to the mobile station."

By the present amendment, independent claims 1, 12, 23, 26, 29, 32, 34, 36 and 39 have been amended to clarify that the service feature request of claims 1, 12, 23, 32 and 34, and the service feature messages of claims 26, 29, 36 and 39, pertain to wireless subscriber features that are provisioned on behalf of a wireless terminal and stored by the feature server. In Hall, the only entity offering feature service provisioning is a conventional HLR associated with an MSC in a voice network. There is no data network feature server that stores wireless subscriber

features provisioned on behalf of a wireless terminal, and which is accessed through a data network. The PDN is not described as performing a feature server function. It merely performs “packet switching functions such as packet routing and forwarding between mobile users and the IP (Internet Protocol) based network” (column 7, lines 28-31). Although Hall states that “[t]he MSC . . . also performs packet data service subscription checks in conjunction with a packet data communication request” (column 7, lines 33-36), Hall makes clear that the entity being consulted by the MSC when making such a check is the HLR, which is “maintains subscription information on the subscribers, e.g. indicating if packet communication is allowed or not” (column 7, lines 42-45). There is no statement or inference that the MSC consults the PDN or any other data network entity to determine the feature services associated with a wireless terminal. The passage at column 7, lines 36-39 of Hall regarding the MSC being “responsible for the configuration of the radio network resources necessary for implementing packet data service” also fails to evidence the presence of a data network-accessible feature server. Nor is the presence of such a feature server demonstrated by the passage at column 7, lines 39-42 regarding the MSC “semipermanently” carrying “packet data service user data and control signalling data.” These passages describe conventional MSC functions relating to radio network control and switching.

The independent claims have been further amended to recite in the claim bodies that service feature information is processed without VLR storage thereof. The data network through which the feature server is accessed is also recited as being a “public data network.” Dependent claims 2 and 13 additionally recite that the public network is the Internet.

A common feature of each of the rejected claims is that service feature information for wireless devices can be provided without use of a VLR by storing such information in a

centralized location associated with a public data network, namely, a feature server located in a home network that is accessible via the data network. Note that the home network can be a wireless network or could be part of the data network itself, as shown by the three feature server examples in Applicants' Fig. 2. Regardless of the nature of the feature server's home network, service features for wireless devices are obtained by sending service feature requests from a wireless telecommunication network into the data network, e.g., via a wireless network switch that is connected to the data network, for delivery to the feature server in the home network. This avoids having to maintain VLRs and the overhead associated with the usual HLR/VLR intercommunication messaging.

The Sallberg reference lacks any teaching or suggestion of accessing a data network for the purpose of obtaining wireless device service feature information. In fact, it does not seem to have anything to do with feature service lookups at all. As shown in Fig. 3A, and as described in paragraph 0025, Sallberg is directed to a system wherein a mobile station 300 that is connected to the Internet 390 can receive voice calls by requesting a voice gateway feature 325 to forward incoming calls from the PSTN 350 to a voice gateway 340 that converts the calls to IP format so they can be received at the mobile station while it is in the IP communication mode. The Internet 390 is the only data network shown in Sallberg, and it plays no role in the functioning of Sallberg's call forwarding system. The Internet 390 is shown for the sole purpose of illustrating that the mobile station 300 is connected thereto, presumably for conventional purposes such as Web surfing, email, etc.

As acknowledged on page 2, lines 8-14 of the Office Action, "Sallberg . . . does not disclose accessing a packet data network from a wireless network by issuing a feature service request into said packet data network for administering service features for a wireless call

without use of a VLR to or from a wireless terminal in a home network; managing all service features in a central location by delivering said feature request to a feature server located in said home network.” However, the Office cites Hall as teaching “accessing by a (MSC) (i.e., a switch) into a packet data network (packet data network or internet protocol base network) (fig. 1) from a wireless network (radio network) (fig. 1) by issuing a feature service request (packet data communication request) into said packet data network (packet data, internet protocol base network, internet) for administering service features (packet data communication request) for a wireless call without use of a VLR to or from a wireless terminal (ms) (fig. 1) in a home network (i.e., the HLR, MSC and the base station with is connected to the mobile station (fig. 1 and col. 7, lines 15-50 and col. 11 lines 3-6); managing all service features in a central location (MSC) by delivering said feature service request to a feature server (PDN), located in said home network (i.e., the HLR, MSC and the base station with is connected to the mobile station) (fig. 1 and col. 7 lines 24-50).” Office Action, page 2, line 14 to page 3, line 7.

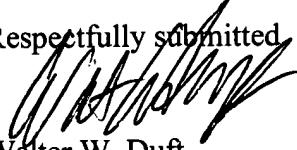
Hall is directed to a system and method wherein an MSC routes speech/circuit data via another MSC connected to the PSTN, and also routes packet data via a PDN (packet switch) connected to the Internet. The Hall MSC does not appear to send feature service requests into the Internet or any other data network. For one thing, Hall doesn’t show any feature server connected to the Internet or other data network. Instead, as stated at column 7, lines 33-36 and 42-45, and as shown in Hall’s Fig. 1, the MSC connects to a conventional HLR. It uses the HLR to perform packet data service subscription checks. This is the only feature service mentioned in the cited passage spanning column 7, lines 15-50 of Hall.

As stated above, there no basis for concluding that the PDN in Hall’s Fig. 1 is a feature server insofar as no such functionality is ascribed to that element (channel registration (col. 11,

lines 3-5) is not feature service). The PDN is just a switch and packet data router (column 7, lines 28-31). Again, the only feature service information mentioned in Hall is the packet data service subscription information provided by Hall's HLR upon Hall's MSC requesting the HLR to perform a lookup. This feature service lookup is said to occur "in conjunction with a packet data communication request" (column 7, lines 33-36). Hall does not state that the packet data communication request itself is a feature service request. At best, Hall suggests that the packet data communication request may cause the MSC to consult the HLR. Moreover, even if the packet data communication request can somehow be considered to comprise, embody, or contain a feature service request, there is no involvement of the PDN in providing a service feature response insofar as Hall plainly states that this is the job of the HLR.

As such, it appears that Hall does not supply the missing limitation of Sallberg of "accessing . . . a packet data network from a wireless network by issuing a feature service request into said packet data network [and] . . . managing all service features in a central location by delivering said feature request to a feature server . . ." Thus, the rejections under 35 U.S.C. 103, all of which are based on Sallberg and Hall, do not appear to properly support a conclusion of obviousness.

In view of the foregoing, Applicant respectfully requests that the rejections be withdrawn, and that Notices of Allowability and Allowance be duly issued.

Respectfully submitted

Walter W. Duff
Attorney for Applicant
Registration No. 31,948

8616 Main Street, Suite 2
Williamsville, New York 14221
Telephone: (716) 633-1930